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|-------------------------------|------------------------|---------------------|--|
| Notice of Allowability | Application No. | Applicant(s) | |
| | 10/710,341 | TAKAHASHI ET AL. | |
| | Examiner | Art Unit | |
| | Tran N. Nguyen | 2834 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-9.
3. ☒ The drawings filed on 02 July 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date ____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date <u>07/04</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

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Allowable Subject Matter

Claims 1-9 are allowed.

Reason for Allowability

The following is an examiner's statement of reasons for allowance: the primary reason for the allowance is the including, in combination with other limitations recited in the claims, the limitations of a motor comprising:

a column-shaped shaft extending in a vertical direction;

a sleeve impregnated with oil, which is cylindrical and rotatably supports the shaft therein, a sleeve-type bearing being formed between the shaft and the sleeve;

a rotor provided with a disc-shaped portion expanding from an upper end portion of the shaft about the shaft, a cylindrical portion hanging downwardly from an outer peripheral edge of the disc-shaped portion, and at least two peripheral wall portions, an inner wall portion and an outer wall portion, which are hanging downwardly from the lower face of the disc-shaped portion toward the upper end of the sleeve about the shaft so as to surround the shaft, and are spaced from each other in a radial direction of the shaft;

a housing having a cylindrical sleeve holding portion holding the sleeve inside thereof;

a stator fixed outside of the sleeve holding portion;

a cylindrical magnet which is fixed on the inner peripheral face of the cylindrical portion so as to be opposed to the stator for generating a rotational driving force in the rotor together with the stator; and

an annular recessed portion located in an outer peripheral location of the outer wall portion so as to surround an open space over the sleeve, the open space in which the inner and the outer wall portion are accommodated, for preventing oil from leaking out,

the annular recessed portion having a lower top of the most inner part, wherein the lower end of the inner wall portion is located lower than the lower end of the outer wall portion, and the lower end of the outer wall portion is located lower than the lower top of the annular recessed portion.

Comparing to the prior-art of the record, the most relevant reference is Pub No. US 2004/0052662 of Hsiang et al. Hsiang discloses a motor having oil leaking shield assembly having a recess (113) formed by two annular walls. However, Hsiang does not disclose that the following:

an annular recessed portion located in an outer peripheral location of the outer wall portion so as to surround an open space over the sleeve, the open space in which the inner and the outer wall portion are accommodated, for preventing oil from leaking out,

the annular recessed portion having a lower top of the most inner part, wherein the lower end of the inner wall portion is located lower than the lower end of the outer wall portion, and the lower end of the outer wall portion is located lower than the lower top of the annular recessed portion.

Thus, none of the prior art references of the record, either stand-alone or in combination, has taught or suggest the above-mentioned features in combination with other limitations recited in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

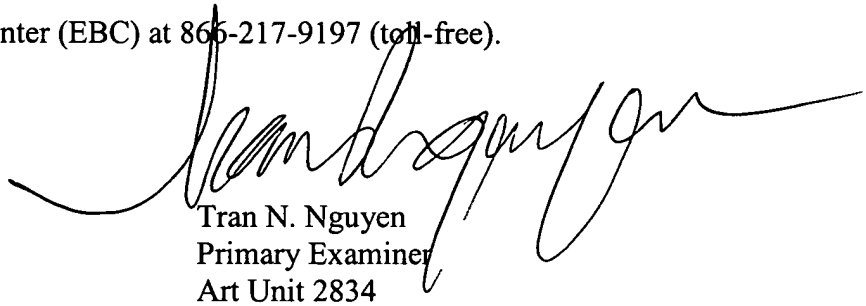
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N. Nguyen whose telephone number is (571) 272-2030. The examiner can normally be reached on M-F 7:00AM-4:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571)-272-2045. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tran N. Nguyen
Primary Examiner
Art Unit 2834